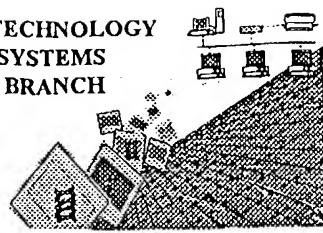


BIOTECHNOLOGY
SYSTEMS
BRANCH



RAW SEQUENCE LISTING
ERROR REPORT

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number: 10/089,211A
Source: IFW16
Date Processed by STIC: 9/17/04

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.

PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:

- 1) INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,
- 2) TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY

FOR CRF SUBMISSION AND PATENTIN SOFTWARE QUESTIONS, PLEASE CONTACT MARK SPENCER, TELEPHONE: 571-272-2510; FAX: 571-273-0221

TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE CHECKER VERSION 4.2 PROGRAM, ACCESSIBLE THROUGH THE U.S. PATENT AND TRADEMARK OFFICE WEBSITE. SEE BELOW FOR ADDRESS:

<http://www.uspto.gov/web/offices/pac/checker/chkrnote.htm>

Applicants submitting genetic sequence information electronically on diskette or CD-Rom should be aware that there is a possibility that the disk/CD-Rom may have been affected by treatment given to all incoming mail.

Please consider using alternate methods of submission for the disk/CD-Rom or replacement disk/CD-Rom.

Any reply including a sequence listing in electronic form should NOT be sent to the 20231 zip code address for the United States Patent and Trademark Office, and instead should be sent via the following to the indicated addresses:

1. EFS-Bio (<<http://www.uspto.gov/ebc/efs/downloads/documents.htm>> , EFS Submission User Manual - ePAVE)
2. U.S. Postal Service: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450
3. Hand Carry, Federal Express, United Parcel Service, or other delivery service (EFFECTIVE 06/05/04): U.S. Patent and Trademark Office, 220 20th Street S., Customer Window, Mail Stop Sequence, Crystal Plaza Two, Lobby, Room 1B03, Arlington, VA 22202

Revised 05/17/04

Raw Sequence Listing Error Summary

<u>ERROR DETECTED</u>	<u>SUGGESTED CORRECTION</u>	<u>SERIAL NUMBER:</u> <u>10/089,21A</u>
ATTN: NEW RULES CASES: PLEASE DISREGARD ENGLISH "ALPHA" HEADERS, WHICH WERE INSERTED BY PTO SOFTWARE		
1 <input type="checkbox"/> Wrapped Nucleics <input checked="" type="checkbox"/> Wrapped Aminos	The number/text at the end of each line "wrapped" down to the next line. This may occur if your file was retrieved in a word processor after creating it. Please adjust your right margin to .3; this will prevent "wrapping."	
2 <input checked="" type="checkbox"/> Invalid Line Length	The rules require that a line not exceed 72 characters in length. This includes white spaces.	
3 <input type="checkbox"/> Misaligned Amino Numbering	The numbering under each 5 th amino acid is misaligned. Do not use tab codes between numbers; use space characters , instead.	
4 <input type="checkbox"/> Non-ASCII	The submitted file was not saved in ASCII(DOS) text, as required by the Sequence Rules . Please ensure your subsequent submission is saved in ASCII text.	
5 <input type="checkbox"/> Variable Length	Sequence(s) _____ contain n's or Xaa's representing more than one residue. Per Sequence Rules , each n or Xaa can only represent a single residue. Please present the maximum number of each residue having variable length and indicate in the <220>-<223> section that some may be missing.	
6 <input type="checkbox"/> PatentIn 2.0 "bug"	A "bug" in PatentIn version 2.0 has caused the <220>-<223> section to be missing from amino acid sequences(s) _____. Normally, PatentIn would automatically generate this section from the previously coded nucleic acid sequence. Please manually copy the relevant <220>-<223> section to the subsequent amino acid sequence. This applies to the mandatory <220>-<223> sections for Artificial or Unknown sequences.	
7 <input type="checkbox"/> Skipped Sequences (OLD RULES)	Sequence(s) _____ missing. If intentional, please insert the following lines for each skipped sequence: (2) INFORMATION FOR SEQ ID NO:X: (insert SEQ ID NO where "X" is shown) (i) SEQUENCE CHARACTERISTICS: (Do not insert any subheadings under this heading) (xi) SEQUENCE DESCRIPTION:SEQ ID NO:X: (insert SEQ ID NO where "X" is shown) This sequence is intentionally skipped	
	Please also adjust the "(ii) NUMBER OF SEQUENCES:" response to include the skipped sequences.	
8 <input type="checkbox"/> Skipped Sequences (NEW RULES)	Sequence(s) _____ missing. If intentional, please insert the following lines for each skipped sequence. <210> sequence id number <400> sequence id number 000	
9 <input checked="" type="checkbox"/> Use of n's or Xaa's (NEW RULES)	Use of n's and/or Xaa's have been detected in the Sequence Listing. Per 1.823 of Sequence Rules, use of <220>-<223> is MANDATORY if n's or Xaa's are present. In <220> to <223> section, please explain location of n or Xaa, and which residue n or Xaa represents.	
10 <input checked="" type="checkbox"/> Invalid <213> Response	Per 1.823 of Sequence Rules, the only valid <213> responses are: Unknown, Artificial Sequence, or scientific name (Genus/species). <220>-<223> section is required when <213> response is Unknown or is Artificial Sequence	
11 <input type="checkbox"/> Use of <220>	Sequence(s) _____ missing the <220> "Feature" and associated numeric identifiers and responses. Use of <220> to <223> is MANDATORY if <213> "Organism" response is "Artificial Sequence" or "Unknown." Please explain source of genetic material in <220> to <223> section. (See "Federal Register," 06/01/1998, Vol. 63, No. 104, pp. 29631-32) (Sec. 1.823 of Sequence Rules)	
12 <input type="checkbox"/> PatentIn 2.0 "bug"	Please do not use "Copy to Disk" function of PatentIn version 2.0. This causes a corrupted file, resulting in missing mandatory numeric identifiers and responses (as indicated on raw sequence listing). Instead, please use "File Manager" or any other manual means to copy file to floppy disk.	
13 <input type="checkbox"/> Misuse of n/Xaa	"n" can only represent a single <u>nucleotide</u> ; "Xaa" can only represent a single <u>amino acid</u>	



IFW16

RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/089,211A

DATE: 09/17/2004

TIME: 10:04:37

Input Set : A:\62447.txt

Output Set: N:\CRF4\09172004\J089211A.raw

3 <110> APPLICANT: University of Victoria Innovation and Developement Corporation
 4 Hintz, William E.
 5 Eades, Caleb Joshua
 7 <120> TITLE OF INVENTION: Mannosidases and Methods for using the Same
 9 <130> FILE REFERENCE: 2847-62447-01
 11 <140> CURRENT APPLICATION NUMBER: 10/089,211A
 12 <141> CURRENT FILING DATE: 2002-03-25
 14 <150> PRIOR APPLICATION NUMBER: PCT/US00/27210
 15 <151> PRIOR FILING DATE: 2000-10-02
 17 <150> PRIOR APPLICATION NUMBER: 60/157,341
 18 <151> PRIOR FILING DATE: 1999-10-01
 20 <160> NUMBER OF SEQ ID NOS: 19
 22 <170> SOFTWARE: PatentIn version 3.1
 24 <210> SEQ ID NO: 1
 25 <211> LENGTH: 3328
 26 <212> TYPE: DNA
 27 <213> ORGANISM: Aspergillus nidulans
 29 <400> SEQUENCE: 1

Does Not Comply
Corrected Diskette Needed

pp 216-9

30	agggcctttt cagggcgtgg ttggccaaac ctggcgattt ttcgattcag ggcggggccct	60
32	taattctggg gaccgatatac ccttgaacgc gggggcaatc agttcaacca acccagaccg	120
34	ctgggcttgg tatgagattt cgagcatcta tgtcgggtta ccttctgaat gacaatgaat	180
36	gtatTTact tctcgaaaag aacccttggg cactgaattt tgccggagaat gatgccttga	240
38	ttagtataca actagtccgc tccgtcaagc cacaagggtc tgggcagtcc gctataaattc	300
40	aaaatcgctt gcacgaacag acgaataacc aagaaaaacgc ccgagcgcga gcgttcttc	360
42	ttcctctaag ccttgcagct ggctctgcgt ctttgatcaa ccctttagct gaatttcccc	420
44	agaacttcag ccctctgcat cctgtcctta ccgcaactcg ttaacctgcg cgacctcgcg	480
46	cgaccacagc cttaggttgc gagatgccat gaaaatcaga aattgaaccc cctttccatt	540
48	actatcatcc tctgcatttgc gcgagtgtatc tgccttcga cgttcatttct ttccagcgct	600
50	gcggcgcctt cactctcggtt gcctacgttt gaccacggtc ctacctctcc tactgtgtat	660
52	tattaggctc ctcccatacgc ctccaataca gggaaatgcgc cggccatgtt tcgtgcacga	720
54	cgtatctcgca tctcgctgggtt gtttgcgtt atatttgtcc tcctcatatt ccactttagc	780
56	cgtctcgcaat ttacgatccat cctgcataatc tgggtacctc cgccgcccgt cgatcaccat	840
58	aatccccctt tccccgacca gaaacctaaa gatccatacg aaaacgacaa tagtgcgacc	900
60	ggcagtgggg ctccctccgccc tgcgttggta gagccagaag aataccaacg accaccactt	960
62	tacacagatt cagatgacag cccaactccg tcaaaaagaac gcctggacac cccgagcaat	1020
64	gtccccatctc aggagcctga atttgatgcg gccagacttc agacgggtgc gcagacccaa	1080
66	aataaacatg aagatgatga ggtatattgtc ccaatttctc actggaaagcc gatgcccggaa	1140
68	cgccatccag tcagtccggaa ggcttgcgtt aagctgccaa ccgggcaatc aaaggaactc	1200
70	ccccaaactgc aagctaagtt caaggacgag tgcgttgcgg acaagatgca gccgcgtcaa	1260
72	caacttgaca ctatcaagtc ggcgttctta catgcgttggaa acggtttacaa gatctctgccc	1320
74	atgggtcatg atgaggttag acctctgcgc ggtgggttca aggacacatt caatggctgg	1380
76	ggcgcgaccc ttgtcgacgc ctggatacc ctgtggatca tggatctcaa agaggagttc	1440
78	tccatggcag tcgactacgt caagaaaatc gatTTACCA ccagcaccaaa gaaagagatt	1500

RAW SEQUENCE LISTING
PATENT APPLICATION: US/10/089, 211A

DATE: 09/17/2004
TIME: 10:04:37

Input Set : A:\62447.txt
Output Set: N:\CRF4\09172004\J089211A.raw

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82	ggacacaat acgataact ttggaaaag tctgttgagc ttgcggatgt ctgtatggac	1620
84	gccttcgaca caccgaaccg gatgccaaacc ctctattata aatggagccc agagtatgt	1680
86	tcagagttc gccggggga cttaaggct gttctgcgg agcttggctc tctctcttc	1740
88	gagttcacgc gttggcgca gttgaccaaa caggacaagt actacgatgc aattgcacga	1800
90	atcacaaatg agctgaaaaa gtatcaggat ttgacaaagc ttccggctt gtggctctc	1860
92	aacctggacg catccgggtg caggcgagtt cccggcgctc cgcgagagcc tgctcggt	1920
94	ggcagccag tcagatggtc ctctgacgag atcaactcga cgagctcggt atcgatcg	1980
96	acaagacaaa ttcatgaggg cgagagccct gtccgtcatg acaatgattc gttgaaacg	2040
98	ggtttcctg tatcagtcga tactcgact cctccccaa agcaagattt caccggaggc	2100
100	ctcaacgatc agcttcagg cattgacaag ttgcgactcg gagcccttg tgactctacg	2160
102	tacgagttact taccgaaaga gtatatgtt ctcgcggta acaacgacca gtacctcaac	2220
104	atgtatcaga aggccatgga cacagtgcga gaatatctt tttatcagcc aatgctcaag	2280
106	aataatcgcg atgtccgctt cttagcaca gtttagtatga caaagagcct tgatgcaa	2340
108	cctccggggc gtaccactt cgcgtacgaa ggcactcacc tcacctgtt tgctgggt	2400
110	atgcttgcctt ttggcccaa gttgtttggg ctgtataagg atctaaagct ggtagtcaa	2460
112	ctgacggacg gctgtgtctg gcatatgaa gccacaaagt ccgaaatcat gccggaagca	2520
114	ttccaactgg tccctgtaa gaaaggcgag ccatgcgaat gggatgagga cgcatactac	2580
116	atggccatgg atccttatgc cgacaagcgg ccaatatcac ataacaaacg ctcggccggc	2640
118	cctgaaaagg ggaattggca cgtcgccgac acagccgaat cgtctcgcc ccaggaagat	2700
120	aaaacacaga aatcaaccac tactgagggt cgacacaccg gtacaactac cggggcaggc	2760
122	qcgctctcg acqaggaatt cgtcacggaa aaaatcctca acgaccgact cccggccggc	2820
124	atgacagggc tctcgctcg gcagttaccc tcgcggcgg aggcatcga gtctgtttc	2880
126	atcatgttcc gcctcacggg cgatccttc tgccgcggaa agggttggaa gatgttccag	2940
128	gctgtcgaca aagccacgaa gacggagctg gcgaactcgg ccattccga cgtaccgtc	3000
130	gataatccac gcccgggttga cagttatggaa tcattctggc ttgcggagac tctgaaatac	3060
132	ttctaccttc tttcagcga tccaaggctt gtgagcctt acgaaatatgt cttgtaaatg	3120
134	atgcttgaatc taatcgactg cttgtatgtt actttccct taggaacacc gaggttcatc	3180
136	cgttcaagcg acccaagtac tgaagttacta atttaaatga tcttttagcc tttatctata	3240
138	catggccgctt ccgctgttga agcattgata ccattaagac agtacgtctt cattcggtt	3300
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143 <210> SEQ ID NO: 2
144 <211> LENGTH: 2448
145 <212> TYPE: DNA
146 <213> ORGANISM: Aspergillus nidulans
148 <220> FEATURE:
149 <221> NAME/KEY: variation
150 <222> LOCATION: (1632)..(1632)
151 <223> OTHER INFORMATION: R = A, C, G, or T
154 <400> SEQUENCE: 2

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157	atattccact ttagccgtct cgcaggatcg atcgcctgc aatcttgggt acctccggc	120
159	cccgatc accataatcc cccttcccc gaccagaacc tcaaagatcc atacgaaaac	180
161	gacaatagtg cgacccggcag tggggctctt cgcctcggt tggttagagcc agaagaatac	240
163	caacgaccac cactttacac agattcagat gacagccaa ctccgtcaaa agaacgcctg	300
165	gacaccccgaa gcaatgtccc atctcaggag cctgaatttg atgcgcgcag acttcagacg	360
167	ggtgcgcaga cccaaaataa acatgaagat gatgaggata ttgtcccaat ttctcactgg	420
169	aagccatgc ccgaaacggca tccagtcgtt ccggaggctt tgatcaagct gccaaccggg	480
171	caatcaaagg aactccccca actgcacatc aagtcaagg acgagtcgtc ctggacaag	540

*Per Sequence Rules, "r" can only
represent "a" or "g." Use "n" to
represent a, c, g, or t.*

RAW SEQUENCE LISTING
PATENT APPLICATION: US/10/089, 211A

DATE: 09/17/2004
TIME: 10:04:37

Input Set : A:\62447.txt
Output Set: N:\CRF4\09172004\J089211A.raw

173	atgcagcggc	tgcaacaact	tgacactatc	aagtccgggt	tcttacatgc	gtggAACGGT	600										
175	tacaagatct	ctgccccatggg	tcatgtatgg	gttagacctc	tgccgggtgg	tttcaaggac	660										
177	acattcaatg	gctggggcgc	gacccttgc	gaccccttgg	ataccctgtg	gatcatggat	720										
179	ctcaaagagg	agtttcctat	ggcagtcgc	tacgtcaaga	aaatcgattt	taccaccagg	780										
181	accaagaaag	agattccgg	ctttgaaacc	actattcgct	acctaggccg	gatgctcggt	840										
183	gcctatgata	tttcgggaca	caaatacgtat	atactttgg	aaaagtctgt	tgagcttgcg	900										
185	gatgtcttga	tggacgcctt	cgacacacccg	aaccggatgc	caaccctcta	ttataaatgg	960										
187	agcccagagt	atgcttcaga	gtttccggg	ggggacttta	aggctgttct	cggccggagtt	1020										
189	ggctctctct	ctctcgagtt	cacgcgttgc	gcccgggtga	ccaaacaggaa	caagttactac	1080										
191	gatgcaattt	cacgaatcac	aaatgagctc	gaaaagtatc	aggatttgc	aaagcttccc	1140										
193	ggcttgcggc	ctctcaaccc	ggacgcattc	gggtgcaggc	gagttccgg	cgtctcgca	1200										
195	gagcctgctg	cggttggca	gccagtcaga	tggtccctcg	acgagatcaa	ctcgacgagc	1260										
197	tcggtatctgt	atcgtacaag	acaattatc	gaggcggag	agcctgtccg	tcatgacaat	1320										
199	gattcgttt	aaacgggtt	tcctgtatca	gtcgataactc	ggacttcc	cccaaagcaa	1380										
201	gattgcaccc	gaggcctcaa	cgatcagctc	tcaggcatttgc	acaagttcg	actcgagcc	1440										
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205	gaccagtacc	tcaacatgta	tcagaaggcc	atggacacag	tgcgagaata	tcttggggat	1560										
207	cagccaatgc	tcaagaataaa	tgcgtatgtc	cgcttcttag	cgacagtttgc	tatgacaaag	1620										
W--> 209	agccttgatg	cnaaacctcc	ggggcgttacc	actttccgt	acgaaggcac	tcacctcacc	1680										
211	tgttttgcgt	gtggatgtt	tgccattggc	gccaagggtt	ttgggcttga	taaggatcta	1740										
213	aagctgggtt	gtcaactgac	ggacgggtgt	gtctggcat	atgaagccac	aaagtccgga	1800										
215	atcatggccgg	aagcattcca	actgggtccct	tgtaagaaag	gcccggcat	cgaatggat	1860										
217	gaggacgcac	actacatggc	catggatctt	tatggcaca	agcggccaaat	atcacataac	1920										
219	aaacgctccg	ccggccctga	aaaggggaaat	tggcacgtcg	tcgcccacagc	cgaatcgct	1980										
221	tcgccccagg	aagataaaaac	acagaaaatca	accactactg	agggtcgaca	caccgggtaca	2040										
223	actaccgggg	caggcgcgtt	ctcgacacgg	gaattcgta	cggggaaaaat	ccttaaacgac	2100										
225	cgactcccg	cgggcatgac	agggatctcg	gttcggcgt	accccttcc	cccgaggcg	2160										
227	atcgagtctg	tcttcatcat	gttccgcctc	acgggcgtt	cttcctggcg	cgaaaagggt	2220										
229	tggaaatgt	tccaggctgt	cgacaaaagcc	acgaagacgg	agctggcgaa	ctcgccatt	2280										
231	tccgacgtaa	ccgtcgataa	tccacgccc	gtggacagta	tggaatcatt	ctggcttgcg	2340										
233	gagactctga	aataacttcta	ccttcttttc	agcgatccaa	gcctgggtgag	ccttgaggaa	2400										
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246	1				5				10					15			
249	Phe	Val	Leu	Leu	Ile	Phe	His	Phe	Ser	Arg	Leu	Ala	Val	Thr	Ile	Ser	
250					20				25					30			
253	Leu	Gln	Ser	Trp	Val	Pro	Pro	Pro	Val	Asp	His	His	Asn	Pro	Pro		
254					35				40					45			
257	Phe	Pro	Asp	Gln	Asn	Leu	Lys	Asp	Pro	Thr	Glu	Asn	Asp	Asn	Ser	Ala	
258					50				55					60			
261	Thr	Gly	Ser	Gly	Ala	Pro	Pro	Pro	Ala	Leu	Val	Glu	Pro	Glu	Glu	Thr	
262					65				70			75			80		
265	Gln	Arg	Pro	Pro	Leu	Thr	Thr	Asp	Ser	Asp	Asp	Ser	Pro	Thr	Pro	Ser	
266									85			90			95		

RAW SEQUENCE LISTING
PATENT APPLICATION: US/10/089,211A

DATE: 09/17/2004
TIME: 10:04:37

Input Set : A:\62447.txt
Output Set: N:\CRF4\09172004\J089211A.raw

269 Lys Glu Arg Leu Asp Thr Pro Ser Asn Val Pro Ser Gln Glu Pro Glu
270 100 105 110
273 Phe Asp Ala Ala Arg Leu Gln Thr Gly Ala Gln Thr Gln Asn Lys His
274 115 120 125
277 Glu Asp Asp Glu Asp Ile Val Pro Ile Ser His Trp Lys Pro Met Pro
278 130 135 140
281 Glu Arg His Pro Val Ser Pro Glu Ala Leu Ile Lys Leu Pro Thr Gly
282 145 150 155 160
285 Gln Ser Lys Glu Leu Pro Gln Leu Gln Ala Lys Phe Lys Asp Glu Ser
286 165 170 175
289 Ser Ser Asp Lys Met Gln Arg Leu Gln Gln Leu Asp Thr Ile Lys Ser
290 180 185 190
293 Ala Phe Leu His Ala Trp Asn Gly Thr Lys Ile Ser Ala Met Gly His
294 195 200 205
297 Asp Glu Val Arg Pro Leu Arg Gly Gly Phe Lys Asp Thr Phe Asn Gly
298 210 215 220
301 Trp Gly Ala Thr Leu Val Asp Ala Leu Asp Thr Leu Trp Ile Met Asp
302 225 230 235 240
305 Leu Lys Glu Glu Phe Ser Met Ala Val Asp Thr Val Lys Lys Ile Asp
306 245 250 255
309 Phe Thr Thr Ser Thr Lys Lys Glu Ile Pro Val Phe Glu Thr Thr Ile
310 260 265 270
313 Arg Thr Leu Gly Gly Met Leu Gly Ala Thr Asp Ile Ser Gly His Lys
314 275 280 285
317 Thr Asp Ile Leu Leu Glu Lys Ser Val Glu Leu Ala Asp Val Leu Met
318 290 295 300
321 Asp Ala Phe Asp Thr Pro Asn Arg Met Pro Thr Leu Thr Thr Lys Trp
322 305 310 315 320
325 Ser Pro Glu Thr Ala Ser Glu Phe Arg Arg Gly Asp Phe Lys Ala Val
326 325 330 335
329 Leu Ala Glu Leu Gly Ser Leu Ser Leu Glu Phe Thr Arg Leu Ala Gln
330 340 345 350
333 Leu Thr Lys Gln Asp Lys Thr Thr Asp Ala Ile Ala Arg Ile Thr Asn
334 355 360 365
337 Glu Leu Glu Lys Thr Gln Asp Leu Thr Lys Leu Pro Gly Leu Trp Pro
338 370 375 380
341 Leu Asn Leu Asp Ala Ser Gly Cys Arg Arg Val Pro Gly Val Ser Arg
342 385 390 395 400
345 Glu Pro Ala Ala Ala Gly Gln Pro Val Arg Trp Ser Ser Asp Glu Ile
346 405 410 415
349 Asn Ser Thr Ser Ser Val Ser Thr Arg Thr Arg Gln Ile His Glu Gly
350 420 425 430
353 Gly Glu Pro Val Arg His Asp Asn Asp Ser Phe Glu Thr Gly Phe Pro
354 435 440 445
357 Val Ser Val Asp Thr Arg Thr Pro Pro Pro Lys Gln Asp Cys Thr Gly
358 450 455 460
361 Gly Leu Asn Asp Gln Leu Ser Gly Ile Asp Lys Phe Gly Leu Gly Ala
362 465 470 475 480
365 Leu Gly Asp Ser Thr Thr Glu Thr Leu Pro Lys Glu Thr Met Leu Leu

RAW SEQUENCE LISTING
PATENT APPLICATION: US/10/089,211A

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TIME: 10:04:37

Input Set : A:\62447.txt
Output Set: N:\CRF4\09172004\J089211A.raw

366	485	490	495													
369	Gly	Asn	Asn	Asp	Gln	Thr	Leu	Asn	Met	Thr	Gln	Lys	Ala	Met	Asp	
370				500				505						510		
373	Thr	Val	Arg	Glu	Thr	Leu	Val	Thr	Gln	Pro	Met	Leu	Lys	Asn	Asn	Arg
374					515				520					525		
377	Asp	Val	Arg	Phe	Leu	Ala	Thr	Val	Ser	Met	Thr	Lys	Ser	Leu	Asp	Ala
378					530				535					540		
381	Asn	Pro	Pro	Gly	Arg	Thr	Thr	Phe	Ala	Thr	Glu	Gly	Thr	His	Leu	Thr
382	545					550				555				560		
385	Cys	Phe	Ala	Gly	Gly	Met	Leu	Ala	Ile	Gly	Ala	Lys	Leu	Phe	Gly	Leu
386						565				570				575		
389	Asp	Lys	Asp	Leu	Lys	Leu	Gly	Ser	Gln	Leu	Thr	Asp	Gly	Cys	Val	Trp
390					580				585					590		
393	Ala	Thr	Glu	Ala	Thr	Lys	Ser	Gly	Ile	Met	Pro	Glu	Ala	Phe	Gln	Leu
394					595				600					605		
397	Val	Pro	Cys	Lys	Lys	Gly	Glu	Pro	Cys	Glu	Trp	Asp	Glu	Asp	Ala	Thr
398					610				615					620		
401	Thr	Met	Ala	Met	Asp	Pro	Thr	Ala	Asp	Lys	Arg	Pro	Ile	Ser	His	Asn
402	625					630				635				640		
405	Lys	Arg	Ser	Ala	Gly	Pro	Glu	Lys	Gly	Asn	Trp	His	Val	Val	Ala	Thr
406						645				650				655		
409	Ala	Glu	Ser	Ser	Ser	Pro	Gln	Glu	Asp	Lys	Thr	Gln	Lys	Ser	Thr	Thr
410						660				665				670		
413	Thr	Glu	Gly	Arg	His	Thr	Gly	Thr	Thr	Gly	Ala	Gly	Ala	Leu	Ser	
414					675				680					685		
417	His	Glu	Glu	Phe	Val	Thr	Gly	Lys	Ile	Leu	Asn	Asp	Arg	Leu	Pro	Pro
418					690				695					700		
421	Gly	Met	Thr	Gly	Ile	Ser	Ala	Arg	Gln	Thr	Leu	Leu	Arg	Pro	Glu	Ala
422	705					710				715				720		
425	Ile	Glu	Ser	Val	Phe	Ile	Met	Phe	Arg	Leu	Thr	Gly	Asp	Pro	Ser	Trp
426						725				730				735		
429	Arg	Glu	Lys	Gly	Trp	Lys	Met	Phe	Gln	Ala	Val	Asp	Lys	Ala	Thr	Lys
430						740				745				750		
433	Thr	Glu	Leu	Ala	Asn	Ser	Ala	Ile	Ser	Asp	Val	Thr	Val	Asp	Asn	Pro
434						755				760				765		
437	Arg	Pro	Val	Asp	Ser	Met	Glu	Ser	Phe	Trp	Leu	Ala	Glu	Thr	Leu	Lys
438						770				775				780		
441	Thr	Phe	Thr	Leu	Leu	Phe	Ser	Asp	Pro	Ser	Leu	Val	Ser	Leu	Glu	Glu
442	785					790				795				800		
445	Thr	Val	Leu	Asn	Thr	Glu	Ala	His	Pro	Phe	Lys	Arg	Pro	Arg	Thr	
446						805				810				815		
449	<210>	SEQ	ID	NO:	4											
450	<211>	LENGTH:	2177													
451	<212>	TYPE:	DNA													
452	<213>	ORGANISM:	Aspergillus nidulans													
454	<400>	SEQUENCE:	4													
455	cggaaatgtgc	ctaaagtggaa	aggttatgtat	atgcccagga	tgcgcggccca	gtcataact									60	
457	ccatcatgggg	acggtccttg	atcctcaagg	cacgaagtgg	agatcagggtc	cgtatgtgc									120	
459	atgcatggcc	catcagcctg	aaggcacttcc	ccaagcaaag	tgcgactcg	gacaccgatg									180	

10/08/89, 211A

6

<210> SEQ ID NO 15

<211> LENGTH: 29

<212> TYPE: DNA

<213> ORGANISM: PCR Primer

<220> FEATURE:

<221> NAME/KEY: y represents c, t, or u; r represents g or a; n represents a, c, g, t, or u; and h represents a, c, t, or u

<222> LOCATION: (1)..(29)

<223> OTHER INFORMATION: ↪ Explanations go on <223> line, not <221> line. See

<400> SEQUENCE: 15

gggggyctng gygartcnntt ctacgagta

29

1.823

same errors in sequence 16

)
Sequence
Rules.

of 7

RAW SEQUENCE LISTING ERROR SUMMARY
PATENT APPLICATION: US/10/089,211A

DATE: 09/17/2004
TIME: 10:04:38

Input Set : A:\62447.txt
Output Set: N:\CRF4\09172004\J089211A.raw

Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:2; N Pos. 1632

Seq#:8; N Pos. 4

Seq#:15; N Pos. 9,18

Seq#:16; N Pos. 4,13,16,22,25

Invalid Line Length:

The rules require that a line not exceed 72 characters in length. This includes spaces.

Seq#:15; Line(s) 812

Seq#:16; Line(s) 827

IMPORTANT (see item 2 on Error Summary Sheet)

VERIFICATION SUMMARY
PATENT APPLICATION: US/10/089,211A

DATE: 09/17/2004
TIME: 10:04:38

Input Set : A:\62447.txt
Output Set: N:\CRF4\09172004\J089211A.raw

L:209 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2 after pos.:1620
L:745 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8 after pos.:0
L:812 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:15
L:817 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:15,Line#:814
L:818 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:15 after pos.:0
L:827 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:16
L:832 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:16,Line#:829
L:833 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:16 after pos.:0